



TRANS TECH CONSULTANTS

Environmental Compliance Services
Engineers • Geologists • Planners
License # 697833 (A-Haz)

September 21, 2005
Job No. 1222.01

FILE COPY

Edward and Margaret Gilmore
27 Rancheria Road
Kentfield, California 94904

Subject: **3rd Quarter 2005 Monitoring Report**
Royal Coach Car Wash, 7360 Commerce Boulevard, Cotati, California
SCDHS-EHD Site #00001357; NCRWQCB Site #1TSO509

Dear Mr. and Mrs. Gilmore:

This report presents the results of the 3rd Quarter 2005 groundwater monitoring event performed at the subject site. The site is approximately located as shown on the attached Site Location Map, Plate 1. The work was performed in general accordance with recommendations made in our January 10, 2005 *Report of Investigation / Additional Monitoring Wells* report and with directives and guidelines outlined in a February 3, 2005 letter from Mr. Dale Radford of the Sonoma County Department of Health Services - Environmental Health Division (SCDHS-EHD).

Monitoring Well Sampling

On August 30, 2005, groundwater samples were collected from the shallow monitoring wells (wells) MW-1, MW-4, MW-7, and MW-8, and the deep wells MW-1D, MW-2D, and MW-3D. The approximate location of the wells and general site features are shown on the attached Site Plan/Groundwater Elevation Contour Map, Plate 2. Prior to sampling, static water levels were measured in all wells and each well was checked for the presence of free product using an oil/water interface probe. No free product was reported during this monitoring event. To produce representative groundwater samples prior to sampling, the wells were purged of approximately three well casing volumes using a submersible pump. In addition, indicator parameters such as the temperature, pH, and conductivity were measured and allowed to stabilize during purging. The water level in each well was also allowed to recover to near static levels prior to sampling. Groundwater samples were collected using a separate disposable bailer for each well and transferred into the appropriate containers supplied by the laboratory. The groundwater samples were labeled, stored on ice and transported under Chain-of-Custody documentation to Analytical Sciences of Petaluma, California. Analytical Sciences is a State-certified laboratory for the analyses requested. Purge water generated during the sampling of the wells was stored onsite in 55-gallon Department of Transportation (DOT)- approved drums, pending disposal. The Groundwater Field Sampling Forms are attached in Appendix A.

Water Level Measurements

The monitoring well top-of-casing (TOC) elevations, depths to groundwater, the groundwater elevations, and the calculated groundwater flow directions and gradients for the August 30, 2005 sampling event are tabulated in Table 1a and 1b. Elevations are expressed in feet relative to mean sea level (msl), depths are expressed in feet and gradients are expressed in feet per foot. Historical groundwater flow direction and gradient data for the shallow wells is presented in Appendix B. Historical groundwater flow direction and gradient data for the deep wells is presented in Appendix C.

Table 1a: Groundwater Flow Direction and Gradient Data - Shallow Wells

Date	Monitoring Well ID	TOC Elevation (feet - msl)	Depth to Groundwater (feet)	Water Level Elevation (feet - msl)	Groundwater Flow Direction & Gradient (i)
08/30/05	MW-1	99.52	10.52	89.00	Northwesterly $i = 0.007$
	MW-2	99.39	10.40	88.99	
	MW-3	99.18	9.32	89.96	
	MW-4	98.79	10.10	88.69	
	MW-5	99.16	10.10	89.06	
	MW-6	99.42	10.45	88.97	
	MW-7	98.86	9.95	88.91	
	MW-8	99.09	10.63	88.46	
	MW-9	99.42	10.43	88.99	

Table 1b: Groundwater Flow Direction and Gradient Data - Deep Wells

Date	Monitoring Well ID	TOC Elevation (feet - msl)	Depth to Groundwater (feet)	Water Level Elevation (feet - msl)	Groundwater Flow Direction & Gradient (i)
08/30/05	MW-1D	99.11	13.32	85.79	N 80° W $i = 0.02$
	MW-2D	98.45	13.11	85.34	
	MW-3D	98.89	14.60	84.29	

Groundwater elevation contours based on MW-1 through MW-9 for the August 30, 2005 monitoring event are attached on Plate 2. Groundwater elevation contours based on MW-1D through MW-3D for the August 30, 2005 monitoring event are shown on the attached Site Plan/Groundwater Elevation Contour Map - Deep Wells, Plate 3.



Laboratory Analysis

Groundwater samples collected from the monitoring wells were analyzed for total petroleum hydrocarbons (TPH) as gasoline by EPA Test Method 8015. The volatile organic compounds: benzene, toluene, ethylbenzene, and total xylenes (BTEX), the additional oxygenated gasoline additives; methyl tert-butyl ether (MtBE), tert-butyl alcohol (TBA), tert-amyl methyl ether (TAME), di-isopropyl ether (DIPE), and ethyl tert-butyl ether (ETBE), and lead scavengers were analyzed using EPA Test Method 8260B. The laboratory analytical results for the August 30, 2005 sampling event are tabulated on Table 2a and 2b. The Analytical Sciences laboratory report including the chain-of-custody documentation is attached in Appendix D. Historical groundwater analytical data for the shallow wells is presented in Appendix E. Historical groundwater analytical data for the deep wells is presented in Appendix F. Time vs. Concentration Graphs that plot TPH as gasoline, benzene and MtBE concentrations over time for the shallow wells MW-1, MW-4 and MW-7 are enclosed in Appendix G.

Table 2a: Groundwater Analytical Results - Shallow Wells

Date	Well ID	TPH-g	B	T	E	X	MtBE	TBA	TAME
		µg/L							
08/30/05	MW-1	6,200	1,200	<20	330	<20	190	<500	46
	MW-2	NS	NS	NS	NS	NS	NS	NS	NS
	MW-3	NS	NS	NS	NS	NS	NS	NS	NS
	MW-4	1,400	19	<1.0	3.8	18.2	53	1,300	11
	MW-5	NS	NS	NS	NS	NS	NS	NS	NS
	MW-6	NS	NS	NS	NS	NS	NS	NS	NS
	MW-7	43,000	7,600	5,500	4,300	7,100	<100	<2,500	<100
	MW-8	320	31	<1.0	<1.0	2.5	110	160	20
	MW-9	NS	NS	NS	NS	NS	NS	NS	NS

< = Indicates the laboratory test method detection limit.
NS = Not sampled.
Note: Additional oxygenated fuel additives and lead scavengers not detected above the laboratory reporting limit.

Table 2b: Groundwater Analytical Results - Deep Wells

Date	Well ID	TPH-g	B	T	E	X	MtBE	TBA	TAME
		µg/L							
08/30/05	MW-1D	95	<1.0	<1.0	<1.0	<1.0	23	<25	2.4
	MW-2D	<50	<1.0	<1.0	<1.0	<1.0	1.5	<25	<1.0
	MW-3D	<50	<1.0	<1.0	<1.0	<1.0	6.8	<25	<1.0

< = Indicates the laboratory test method detection limit.
Note: Additional oxygenated fuel additives and lead scavengers not detected above the laboratory reporting limit.



Discussion

TPH as gasoline was detected in groundwater samples collected from MW-1, MW-4, MW-7, MW-8, and MW-1D at concentrations of 6,200 µg/L, 1,400 µg/L, 43,000 µg/L, 320 µg/L, and 95 µg/L respectively. BTEX constituents were detected in samples collected from MW-1, MW-4, MW-7, and MW-8 with benzene occurring at a maximum concentration of 7,600 µg/L in MW-7. In addition, MtBE was detected in samples collected from MW-1, MW-4, MW-8, MW-1D, MW-2D, and MW-3D at concentrations of 190µg/L, 53 µg/L, 110 µg/L, 23µg/L, 1.5µg/L, and 6.8µg/L respectively. The oxygenated gasoline additive TBA was detected in the samples collected from MW-4 and MW-8 at concentrations of 1,300µg/L and 160 µg/L, respectively. The oxygenated gasoline additive TAME was detected in the samples collected from MW-1, MW-4, MW-8, and MW-1D at concentrations of 46µg/L, 11 µg/L, 20 µg/L, and 2.4 µg/L, respectively.

Groundwater contaminant concentration trends observed in shallow wells MW-1, MW-4, and MW-7 appear to be relatively consistent. However, with historical results, it appears that benzene and MtBE concentrations are gradually increasing over time in well MW-1 and TPH as gasoline and MtBE concentrations are gradually decreasing over time in well MW-4. TPH as gasoline concentrations also appear to be gradually increasing over time in well MW-7. The most recent analytical results also indicate impact to the groundwater from TPH as gasoline and BTEX constituents in well MW-8. TPH as gasoline had only previously been detected in the samples collected from well MW-8 during the November 2004 sampling event.

The August 30, 2005 sampling event represents one complete hydrogeologic cycle subsequent to the November 2004 installation of the deeper water-bearing zone wells; MW-1D, MW-2D, and MW-3D. In general, it appears that groundwater in the deeper aquifer is impacted from MtBE in the vicinity of wells MW-1D through MW-3D. TPH as gasoline impact in wells in the deeper aquifer has been historically detected in wells MW-1D and MW-2D, but has remained non-detect over the past three quarters in well MW-2D. TPH as gasoline concentrations in MW-1D have been non-detect during two of the four quarters and concentrations have ranged from 57µg/L to 95µg/L.

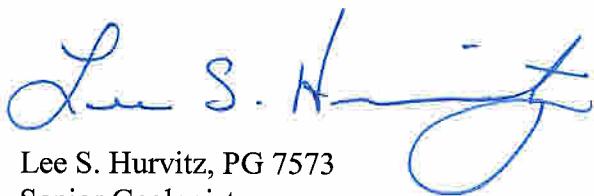
We recommend continued quarterly sampling of the shallow and deeper monitoring wells to further evaluate groundwater level fluctuations and contaminant concentration trends. The next sampling event is scheduled for November 2005 and will include the sampling of all wells.



We appreciate the opportunity to be of service to you and trust that this provides the information you require at this time. If you have any questions or require any additional information, please feel free to contact us at (707) 575-8622 or www.transtechconsultants.com.

Sincerely,
TRANS TECH CONSULTANTS

Brian R. Hasik
Staff Geologist


Lee S. Hurvitz, PG 7573
Senior Geologist

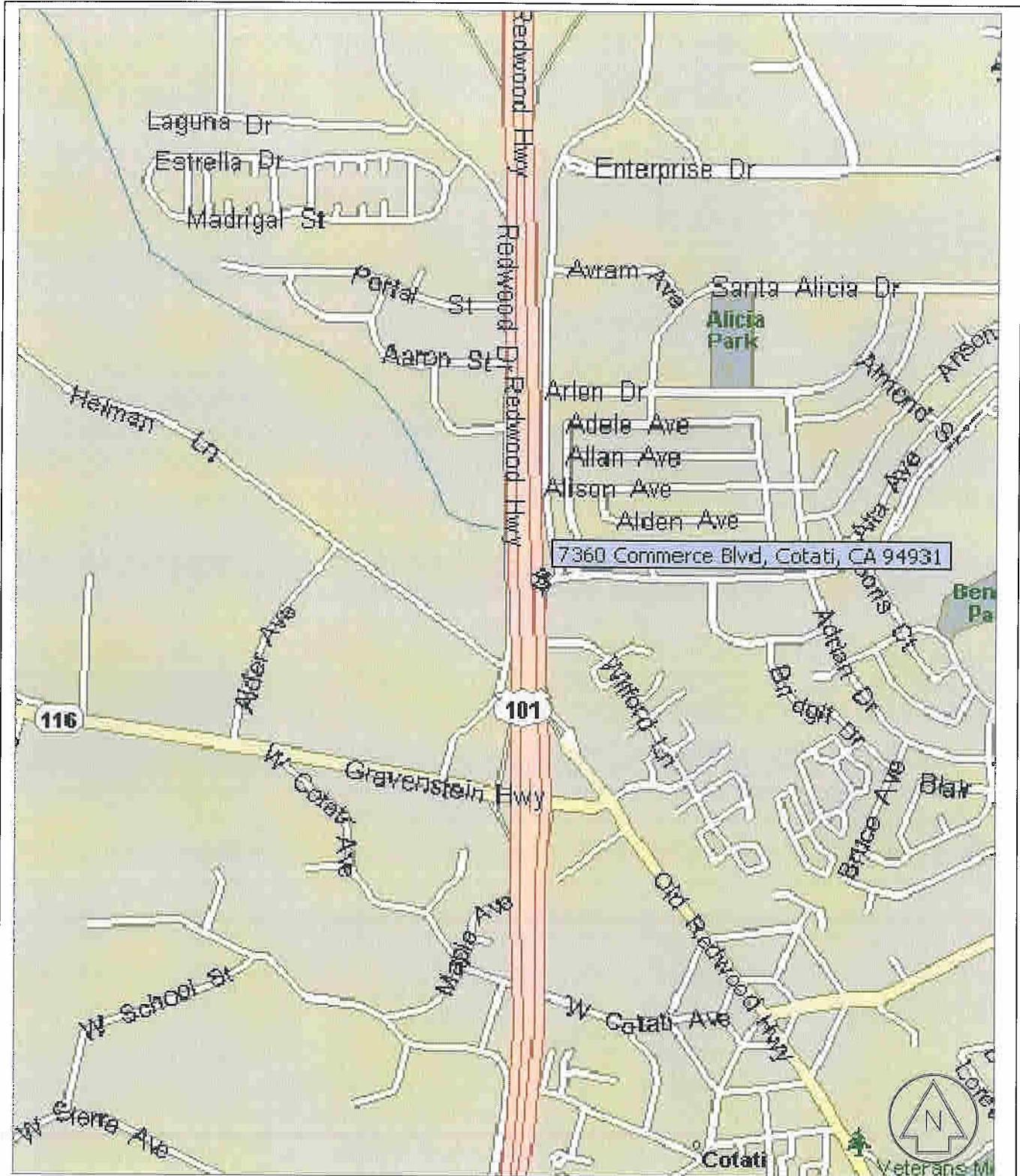


QMR_1222_01_092105

Attachments:

- Plate 1, Site Location Map, Plate 1
- Plate 2, Site Plan / Groundwater Elevation Contour Map - Shallow Wells
- Plate 3, Site Plan / Groundwater Elevation Contour Map - Deep Wells
- Appendix A, Groundwater Field Sampling Forms
- Appendix B, Historical Groundwater Flow Direction and Gradient Data - Shallow Wells
- Appendix C, Historical Groundwater Flow Direction and Gradient Data - Deep Wells
- Appendix D, Analytical Sciences Laboratory Report dated September 12, 2005
- Appendix E, Historical Groundwater Analytical Data - Shallow Wells
- Appendix F, Historical Groundwater Analytical Data - Deep Wells
- Appendix G, Time Vs. Concentration Graphs MW-1, MW-4, MW-7
- Distribution List





TRANS TECH CONSULTANTS

930 SHILOH RD., BLDG 44, SUITE J
WINDSOR, CA 95492
PHONE: 707-575-8622 FAX: 707-837-7334

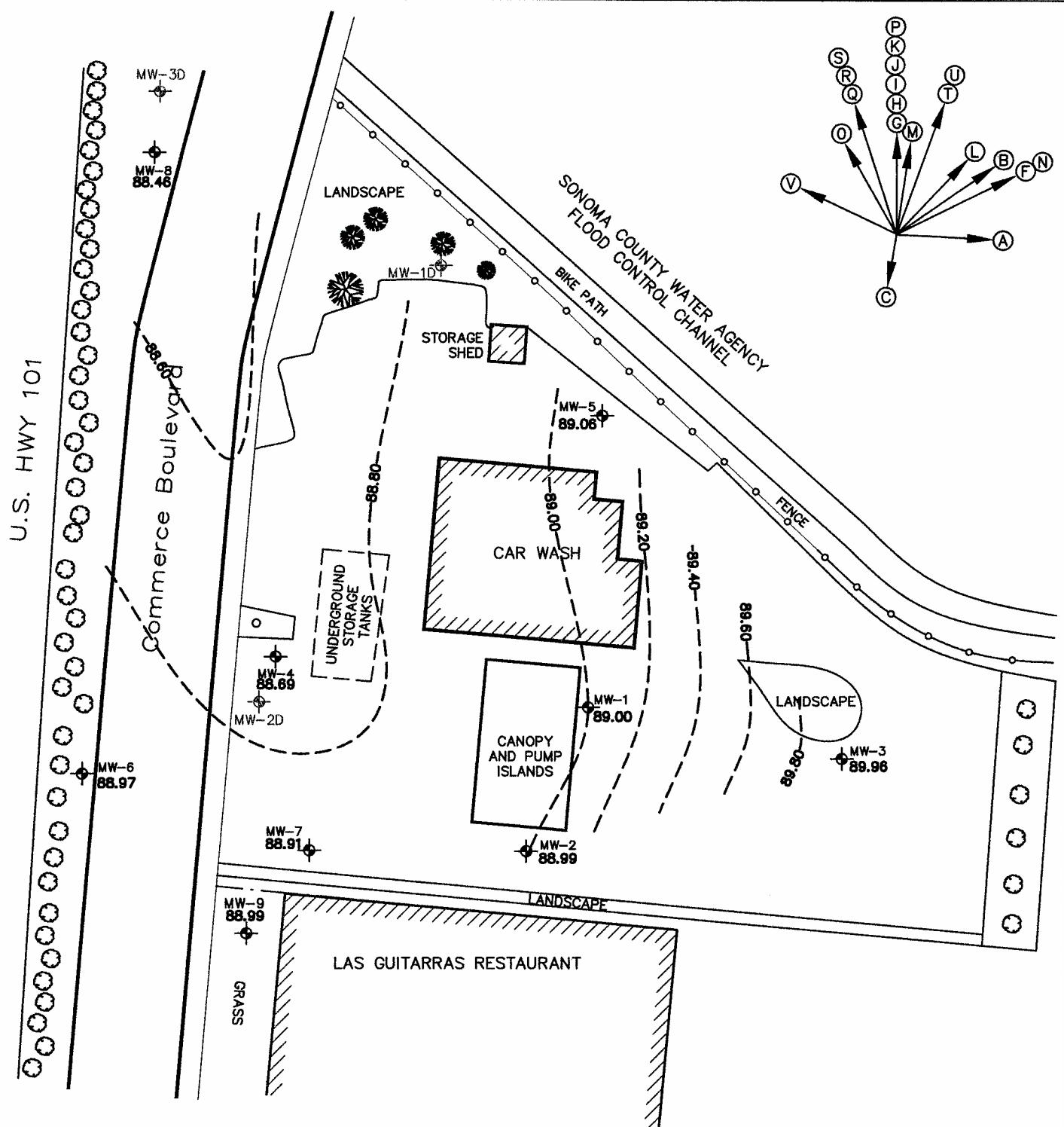
SITE LOCATION MAP

ROYAL COACH CARWASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

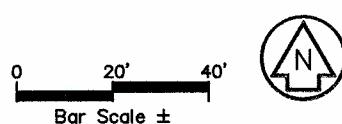
PLATE:

1

DRAWN BY: PSC	DWG NAME: 1222.01 SLM	APPR. BY: BCW	JOB NUMBER: 1222.01	W.O. NUMBER: A-340	REVISIONS:	DATE: 12/15/03
------------------	--------------------------	------------------	------------------------	-----------------------	------------	-------------------



 MONITORING WELL LOCATION



TRANS TECH CONSULTANTS

930 SHILOH RD., BLDG 44, SUITE J
WINDSOR, CA 95492
PHONE: 707-575-8622 FAX: 707-837-7334

**SITE PLAN / GROUNDWATER ELEVATION CONTOUR MAP
FOR 8/30/05 SHALLOW WELLS**

ROYAL COACH CAR WASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

PLATE:
2

DRAWN BY: DWG NAME: APPR. BY: JOB NUMBER: W.O. NUMBER: REVISIONS: DATE:
PSC 1222.01 GWFP BRH 1222.01 A-833 SHEET: 1 OF 2

GROUNDWATER FLOW LEGEND

Estimated Groundwater Flow Direction	Gradient Contour (Interval = 0.20 ft)	Identifier Tag	Date	Est. Flow Direction	Gradient Slope
→ A	— — — —				
Identifier Tag	Date	Est. Flow Direction	Gradient Slope		
(A)	6/26/01	S85°E	i=0.01		
(B)	7/31/01	N60°E	i=0.01		
(C)	8/23/01	S10°W	i=0.02		
(D)	9/24/01	VARIES			
(E)	10/24/01	VARIES			
(F)	11/19/01	N65°E	i=0.03		
(G)	12/21/01	NORTH	i=0.03		
(H)	1/23/02	NORTH	i=0.02		
(I)	3/27/02	NORTHERLY	i=0.02		
(J)	6/28/02	NORTHERLY	i=0.02		
(K)	10/3/02	NORTHERLY	i=0.01		
(L)	2/7/03	N45°E	i=0.01		
(M)	5/7/03	NORTHERLY	i=0.02		
(N)	8/14/03	NORTH EASTERLY	i=0.03		
(O)	11/18/03	NORTH WESTERLY	i=VARIES		
(P)	2/24/04	NORTHERLY	i=0.02		
(Q)	5/26/04	NORTH WESTERLY	i=0.01		
(R)	8/11/04	NORTH WESTERLY	i=0.01		
(S)	11/17/04	NORTH WESTERLY	i=0.01		
(T)	2/17/05	NORTH EASTERLY	i=0.02		
(U)	5/25/05	NORTH EASTERLY	i=0.02		
(V)	8/31/05	NORTH WESTERLY	i=0.007		



MW-1 Monitoring Well Location
[XX.XX] Groundwater Elevation

NOTE: Ground water elevations are in feet above mean sea level (National Geodetic Vertical Datum, 1929).

TRANS TECH CONSULTANTS

930 SHILOH RD., BLDG 44, SUITE J
WINDSOR, CA 95492
PHONE: 707-575-8622 FAX: 707-837-7334

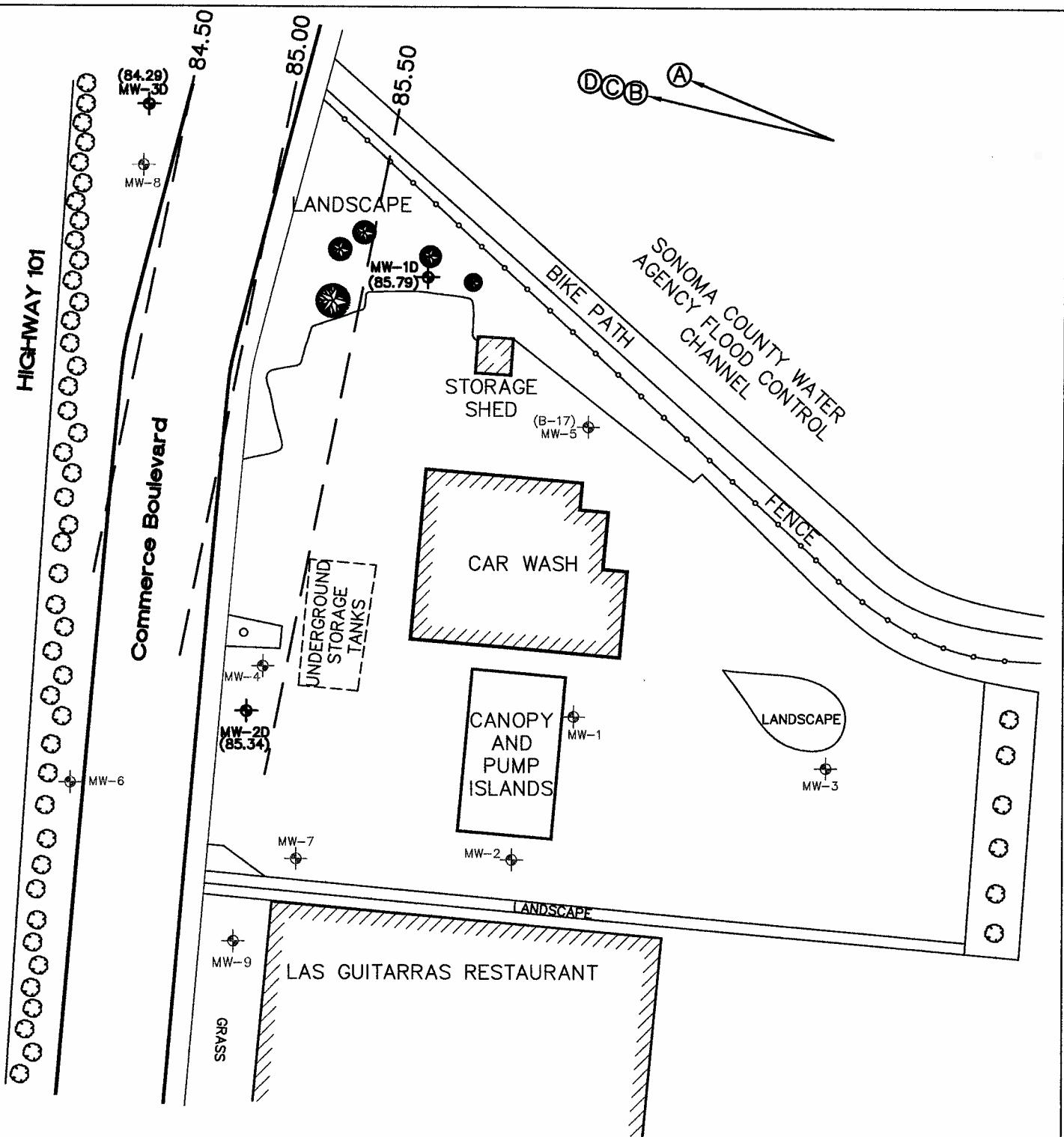
SITE PLAN / GROUNDWATER ELEVATION CONTOUR MAP FOR 8/30/05 SHALLOW WELLS

ROYAL COACH CAR WASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

PLATE:

2

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:	SHEET: 2 OF 2
PSC	1222.01 GWFP	BRH	1222.01	A-833		9/20/05	



TRANS TECH CONSULTANTS

930 SHILOH RD., BLDG 44, SUITE J
WINDSOR, CA 95492
PHONE: 707-575-8622 FAX: 707-837-7334

**SITE PLAN / GROUNDWATER ELEVATION CONTOUR MAP
FOR 8/30/05 DEEP WELLS**

ROYAL COACH CAR WASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

PLATE:

3

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
JLP	1222.01 GWFP	BRH	1222.01	A-833		9/16/05

SHEET 1 OF 2

GROUNDWATER FLOW LEGEND



MW-1 Monitoring Well Location
[XX.XX] Groundwater Elevation

NOTE: Ground water elevations are in feet above mean sea level (National Geodetic Vertical Datum, 1929).



TRANS TECH CONSULTANTS

930 SHILOH RD., BLDG 44, SUITE J
WINDSOR, CA 95492
PHONE: 707-575-8622 FAX: 707-837-7334

SITE PLAN / GROUNDWATER ELEVATION CONTOUR MAP
FOR 8/30/05 DEEP WELLS

ROYAL COACH CAR WASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

PLATE:
3

DRAWN BY: DWG NAME: APPR. BY: JOB NUMBER: W.O. NUMBER: REVISIONS: DATE:
JLP 1222.01 GWFP BRH 1222.01 A-833 SHEET 2 OF 2

APPENDIX A

APPENDIX A

APPENDIX A

APPENDIX A

APPENDIX A

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name: 1222.01 Royal Coach Car Wash		Well Number: MW-1
Project Location: 7360 Commerce Blvd. Cotati, California		Casing Diameter: 2"
		Well Depth from TOC (BP): 22-00 Well Depth from TOC (AP):
Date: August 30, 2005		Top of Screen: Initial Well Depth:
Sampled by (print and sign): Brian Hasik <i>(B. Hasik)</i>		Product Thickness in inches: 8
		Water Level from TOC: 10-52 Time: 12:20
Notes:		Water Level pre-purge: 10-52 Time: 12:50
		Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:
		Well EL (TOC): Well Mat: PVC

WEATHER

Wind: Yes <input checked="" type="checkbox"/> No	Clouds: Yes <input checked="" type="checkbox"/> No	Sun: Yes <input checked="" type="checkbox"/> No	Precipitation in last 5 days: Yes <input checked="" type="checkbox"/> No
Rain: Yes <input checked="" type="checkbox"/> No	Fog: Yes <input checked="" type="checkbox"/> No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

(TD) - WL) X (2) X 0.0408 = 1.84 gallons in one well volume
5.57 gallons in 3 well volumes (Approx. 0.6 gal/ft) 6 total gallons purged

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
12:52	1	6.73	21.4	-53		1061	L
12:53	2	6.65	20.9	-55		1095	L
12:55	4	6.65	20.2	-59		1177	L
12:56	6	6.64	20.2	-58		1218	L
12:58	8						

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 10-60 Time: 12:30

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: 8 Soil: 8 Other: 8

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name: 1222.01 Royal Coach Car Wash		Well Number: MW-4
Project Location: 7360 Commerce Blvd. Cotati, California	Casing Diameter: 2"	Well Depth from TOC (BP): 19.90 Well Depth from TOC (AP):
Date: August 30, 2005	Top of Screen:	Initial Well Depth:
Sampled by (print and sign): Brian Hasik <i>Brian Hasik</i>	Product Thickness in inches: 8	
	Water Level from TOC: 10-10	Time: 12:19
	Water Level pre-purge: 10-10	Time: 12:41
	Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:	Well EL (TOC): Well Mat: PVC

WEATHER

Wind: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Clouds: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Sun: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Precipitation in last 5 days: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Rain: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Fog: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

(TD - WL) X (2) X 0.0408 = 1.57 gallons in one well volume

4.7 gallons in 3 well volumes (Approx. 0.6 gal/ft) 5 total gallons purged

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
12:42	1	6.77	21.9	-114		876.3	L
12:43	2	6.78	21.8	-120		965.6	L
12:44	3	6.79	21.4	-121		963.4	L
12:45	4	6.81	20.9	-117		930.6	L
12:46	5	6.81	20.7	-126		889.6	L

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 10.15 Time: 12:20

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: 8 Soil: Other:

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name: 1222.01 Royal Coach Car Wash		Well Number: MW-7
Project Location: 7360 Commerce Blvd. Cotati, California	Casing Diameter: 2"	Well Depth from TOC (BP): 20.00 Well Depth from TOC (AP):
Date: August 30, 2005	Top of Screen:	Initial Well Depth:
Sampled by (print and sign): Brian Hasik <i>Brian Hasik</i>	Product Thickness in inches: 0	
	Water Level from TOC: 10.95	Time: 12:21
	Water Level pre-purge: 9.95	Time: 12:59
	Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:	Well EL (TOC): Well Mat: PVC

WEATHER

Wind: Yes / No	Clouds: Yes / No	Sun: Yes / No	Precipitation in last 5 days: Yes / No
Rain: Yes / No	Fog: Yes / No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

TD	WL	X () ² X 0.0408 = 160 gallons in one well volume
4.89	gallons in 3 well volumes (Approx. 0.6 gal/ft) 5 total gallons purged	

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
1:02	1	6.80	20.0	-59		1033	L
1:03	2	6.81	19.5	-68		1046	L
1:03	3	6.78	19.6	-68		1059	L
1:04	4	6.77	19.2	-70		1063	L
1:05	5	6.78	19.4	-77		1066	L

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 10.07 Time: 2:40

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: 0 Soil: 0 Other: 0

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name: 1222.01 Royal Coach Car Wash		Well Number: MW-8
Project Location: 7360 Commerce Blvd. Cotati, California	Casing Diameter: 2"	Well Depth from TOC (BP): 30.25 Well Depth from TOC (AP):
Date: August 30, 2005	Top of Screen:	Initial Well Depth:
Sampled by (print and sign): Brian Hasik <i>Brian</i>	Product Thickness in inches: 0	
	Water Level from TOC: 10.63	Time: 12:17
	Water Level pre-purge: 10.63	Time: 12:28
	Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:	
Notes: MW-3 9.32 MW-2 10.40 MW-5 10.10 MW-6 10.45 MW-9 10.43	Well EL (TOC):	Well Mat: PVC

WEATHER

Wind: Yes <input checked="" type="checkbox"/> No	Clouds: Yes <input checked="" type="checkbox"/> No	Sun: Yes <input checked="" type="checkbox"/> No	Precipitation in last 5 days: Yes <input checked="" type="checkbox"/> No
Rain: Yes <input checked="" type="checkbox"/> No	Fog: Yes <input checked="" type="checkbox"/> No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

$$(\underline{\hspace{1cm}} - \underline{\hspace{1cm}}) \text{ X } (\underline{\hspace{1cm}}) \text{ X } 0.0408 = \underline{\hspace{1cm}} \text{ gallons in one well volume}$$

TD WL Dia. Inches

7.41 gallons in 3 well volumes (Approx. 0.6 gal/ft) 10 total gallons purged

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection: <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
12:31	1	7.02	20.4	145		983.5	L
12:32	2	6.93	18.9	146		998.2	L
12:34	4	6.89	18.6	145		1018	L
12:36	6	6.86	18.5	143		1042	L
12:37	8	6.92	18.6	141		1040	L
12:39	10	6.85	18.4	143		1021	L

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 10 - 65 Time: 2:10

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: 0 Soil: Other:

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name: 1222.01 Royal Coach Car Wash		Well Number: MW-1D	
Project Location: 7360 Commerce Blvd. Cotati, California		Casing Diameter: 2"	
Date: August 30, 2005		Top of Screen: Initial Well Depth:	
Sampled by (print and sign): Brian Hasik <i>Brian</i>		Product Thickness in inches: <i>0</i>	
		Water Level from TOC: <i>13.34</i>	Time: <i>10:32</i>
Notes: <i>Slight odor?</i>		Water Level pre-purge: <i>13.32</i>	Time: <i>11:25</i>
		Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:	Well EL (TOC): Well Mat: PVC

WEATHER

Wind: Yes / <input checked="" type="checkbox"/> No	Clouds: Yes / <input checked="" type="checkbox"/> No	Sun: Yes / <input checked="" type="checkbox"/> No	Precipitation in last 5 days: Yes / <input checked="" type="checkbox"/> No
Rain: Yes / <input type="checkbox"/> No	Fog: Yes / <input type="checkbox"/> No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

$$(\underline{\hspace{2cm}} - \underline{\hspace{2cm}}) X (\underline{\hspace{2cm}}) 2 X 0.0408 = \underline{\hspace{2cm}} 4.23 \text{ gallons in one well volume}$$

TD WL Dia. Inches

21.69 gallons in 3 well volumes (Approx. 0.6 gal/ft) *22* total gallons purged

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection: <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
11:31	1	7.08	19.1	149		707.3	L
11:35	5	6.99	18.9	-8		714.3	L
11:38	10	6.84	18.9	-95		761.8	L
11:42	15	6.92	18.6	-66		780.7	L
11:45	20	6.86	18.8	-69		797.1	L
11:48	22	6.88	18.7	-71		786.1	L

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: *13.34* Time: *11:55*

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: *8* Soil: Other:

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name: 1222.01 Royal Coach Car Wash		Well Number: MW-2D
Project Location: 7360 Commerce Blvd. Cotati, California	Casing Diameter: 2"	Well Depth from TOC (BP): 56.50 Well Depth from TOC (AP):
Date: August 30, 2005	Top of Screen:	Initial Well Depth:
Sampled by (print and sign): Brian Hasik <i>Brian</i>	Product Thickness in inches:	
	Water Level from TOC: 13-11	Time: 10:35
Notes: Slight odor	Water Level pre-purge: 13-11	Time: 11:49
	Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:	
	Well EL (TOC):	Well Mat: PVC

WEATHER

Wind: Yes / No	Clouds: Yes / No	Sun: Yes / No	Precipitation in last 5 days: Yes / No
Rain: Yes / No	Fog: Yes / No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

$$\frac{(\quad - \quad)}{\text{TD}} \times \frac{(\quad)2}{\text{WL}} \times \frac{0.0408}{\text{Dia. Inches}} = 6.99 \text{ gallons in one well volume}$$

20.82 gallons in 3 well volumes (Approx. 0.6 gal/ft) 21 total gallons purged

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
12:01	1	7.19	20.2	18		870.8	L
12:04	5	7.02	19.8	-60		852.2	L
12:07	10	6.99	19.8	-72		847.5	L
12:10	15	7.00	19.6	-40		846.4	L
12:13	20	7.02	19.6	-31		847.2	L
12:14	21	7.00	19.7	-26		847.0	L

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 13-12 Time: 2:00

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: Soil: Other:

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name: 1222.01 Royal Coach Car Wash		Well Number: MW-3D	
Project Location: 7360 Commerce Blvd. Cotati, California		Casing Diameter: 2"	
		Well Depth from TOC (BP): 56.00 Well Depth from TOC (AP):	
Date: August 30, 2005		Top of Screen: Initial Well Depth:	
Sampled by (print and sign): Brian Hasik 		Product Thickness in inches: 8	
		Water Level from TOC: 14.61	Time: 10:30
Notes:		Water Level pre-purge: 14.60	Time: 10:37
		Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:	
		Well EL (TOC):	Well Mat: PVC

WEATHER

Wind: Yes <input checked="" type="checkbox"/> No	Clouds: Yes <input checked="" type="checkbox"/> No	Sun <input checked="" type="checkbox"/> Yes / No	Precipitation in last 5 days: Yes <input checked="" type="checkbox"/> No
Rain: Yes <input checked="" type="checkbox"/> No	Fog: Yes <input checked="" type="checkbox"/> No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

TD	WL	Dia. Inches	$(\text{TD} - \text{WL}) \times (\text{Dia. Inches})^2 \times 0.0408 = 6.62$ gallons in one well volume
19.87			gallons in 3 well volumes (Approx. 0.6 gal/ft) 20.00 total gallons purged

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
10:58	1	6.46	19.7	134		728.3	L
11:03	5	6.64	18.9	108		735.9	L
11:09	10	6.63	19.2	112		751.8	L
11:15	15	6.66	18.9	104		755.4	L
11:22	20	6.71	18.8	96		758.5	L

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 14.62 Time: 1:45

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: 8 Soil: Other:

APPENDIX B

Appendix B: Historical Groundwater Flow Direction and Gradient Data - Shallow Wells

Date	Monitoring Well ID	TOC Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient
03/13/01	MW-1	97.31	10.44	86.87	Variable
	MW-2	97.19	9.55	87.64	
	MW-3	96.95	9.09	87.86	
	MW-4	96.59	9.00	87.59	
	MW-5	96.97	9.78	87.19	
	MW-6	97.17	8.45	88.72	
06/26/01	MW-1	97.31	16.90	80.41	Variable
	MW-2	97.19	16.40	80.79	
	MW-3	96.95	16.40	80.55	
	MW-4	96.59	15.86	80.73	
	MW-5	96.97	16.11	80.86	
	MW-6	97.17	15.11	82.06	
07/31/01	MW-1	97.31	19.72	77.59	Variable
	MW-2	97.19	18.99	78.20	
	MW-3	96.95	18.99	77.96	
	MW-4	96.59	17.40	79.19	
	MW-5	96.97	19.50	77.47	
	MW-6	97.17	17.70	79.47	
08/23/01	MW-1	97.31	20.88	76.43	S10°W i = 0.02
	MW-2	97.19	20.11	77.08	
	MW-3	96.95	18.51	78.44	
	MW-4	96.59	20.55	76.04	
	MW-5	96.97	17.32	79.65	
	MW-6	97.17	19.26	77.91	



Appendix B continued

Date	Monitoring Well ID	TOC Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet ≥ msl)	Groundwater Flow Direction & Gradient
09/24/01	MW-1	97.31	21.80	75.51	Variable
	MW-2	97.19	21.03	76.16	
	MW-3	96.95	20.06	76.89	
	MW-4	96.59	17.57	79.02	
	MW-5	96.97	21.47	75.50	
	MW-6	97.17	20.16	77.01	
10/24/01	MW-1	97.31	NM	NM	Variable
	MW-2	97.19	21.46	75.73	
	MW-3	96.95	20.82	76.13	
	MW-4	96.59	18.16	78.43	
	MW-5	96.97	NM	NM	
	MW-6	97.17	20.85	76.32	
11/19/01	MW-1 *	99.52	NM	<77.67	N65°E i = 0.03
	MW-2	99.39	18.51	80.88	
	MW-3	99.18	17.99	81.19	
	MW-4	98.79	17.28	81.51	
	MW-5	99.16	20.08	79.08	
	MW-6	99.42	18.96	80.46	
Note: Additional groundwater flow direction data is available prior to June 26, 2001. * Insufficient water in well to measure water level.					



Appendix B continued

Date	Monitoring Well ID	TOC Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient
12/21/01	MW-1	99.52	13.79	85.73**	Due North i = 0.03
	MW-2	99.39	10.61	88.78	
	MW-3	99.18	10.08	89.10	
	MW-4	98.79	11.39	88.40	
	MW-5	99.16	12.89	86.27	
	MW-6	99.42	9.10	90.32	
01/23/02	MW-1	99.52	9.52	90.00	Due North i = 0.02
	MW-2	99.39	9.31	90.08	
	MW-3	99.18	8.62	90.56	
	MW-4	98.79	9.10	89.69	
	MW-5	99.16	9.57	89.59	
	MW-6	99.42	8.36	91.06	
03/27/02	MW-1	99.52	9.67	89.85	Northerly i = 0.02
	MW-2	99.39	8.69	90.70	
	MW-3	99.18	8.35	90.83	
	MW-4	98.79	8.68	90.11	
	MW-5	99.16	9.52	89.64	
	MW-6	99.42	7.80	91.62	
** Water level data was not used to calculate flow direction and gradient.					



Appendix B continued

Date	Monitoring Well ID	TOC Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient
6/28/02	MW-1	99.52	14.48	85.04	Northerly i = 0.02
	MW-2	99.39	13.64	85.75	
	MW-3	99.18	12.40	86.78	
	MW-4	98.79	13.80	84.99	
	MW-5	99.16	12.75	86.41	
	MW-6	99.42	13.10	86.32	
10/02/02	MW-1	99.52	20.65	78.87	Northerly i = 0.01
	MW-2	99.39	20.41	78.98	
	MW-3	99.18	19.59	79.60	
	MW-4	98.79	17.93	80.86	
	MW-5	99.16	20.23	78.93	
	MW-6	99.42	19.50	79.92	
	MW-7	98.86	18.92	79.94	
2/07/03	MW-1	99.52	10.03	89.49	Northerly i = 0.02
	MW-2	99.39	9.88	89.51	
	MW-3	99.18	9.57	89.61	
	MW-4	98.79	9.46	89.33	
	MW-5	99.16	9.68	89.48	
	MW-6	99.42	8.55	90.87	
	MW-7	98.86	8.49	90.37	



Appendix B continued

Date	Monitoring Well ID	TOC Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient
05/07/03	MW-1	99.52	9.11	90.41	Northerly i = 0.02
	MW-2	99.39	8.17	91.22	
	MW-3	99.18	7.52	91.66	
	MW-4	98.79	7.77	91.02	
	MW-5	99.16	9.12	90.04	
	MW-6	99.42	6.89	92.53	
	MW-7	98.86	7.00	91.86	
08/14/03	MW-1	99.52	16.80	82.72	North Easterly i = 0.03
	MW-2	99.39	16.35	83.03	
	MW-3	99.18	15.96	83.22	
	MW-4	98.79	16.01	82.78	
	MW-5	99.16	16.00	83.16	
	MW-6	99.42	14.85	84.57	
	MW-7	98.86	15.04	83.82	
11/18/03	MW-1	99.52	20.70	78.82	North Westerly i = varies
	MW-2	99.39	20.45	78.94	
	MW-3	99.18	17.38	81.80	
	MW-4	98.79	17.49	81.30	
	MW-5	99.16	19.09	80.07	
	MW-6	99.42	18.60	80.82	
	MW-7	98.86	18.56	80.30	



Appendix B continued

Date	Monitoring Well ID	TOC Elevation (feet - msl)	Depth to Groundwater (feet)	Water Level Elevation (feet - msl)	Groundwater Flow Direction & Gradient
02/24/04	MW-1	99.52	8.28	91.24	Northerly i = 0.02
	MW-2	99.39	7.24	92.15	
	MW-3	99.18	6.99	92.19	
	MW-4	98.79	6.83	91.96	
	MW-5	99.16	9.11	90.05	
	MW-6	99.42	5.93	93.49	
	MW-7	98.86	6.18	92.68	
	MW-8	99.09	9.35	89.74	
05/26/04	MW-1	99.52	11.10	88.42	Northwesterly i = 0.01
	MW-2	99.39	10.03	89.36	
	MW-3	99.18	9.50	89.68	
	MW-4	98.79	10.55	88.24	
	MW-5	99.16	10.40	88.76	
	MW-6	99.42	10.60	88.82	
	MW-7	98.86	10.22	88.64	
	MW-8	99.09	11.29	87.80	
	MW-9	99.42	10.53	89.39	
08/11/04	MW-1	99.52	13.42	86.10	Northwesterly i = 0.01
	MW-2	99.39	12.05	87.34	
	MW-3	99.18	11.03	88.15	
	MW-4	98.79	12.66	86.13	
	MW-5	99.16	12.57	86.59	
	MW-6	99.42	12.47	86.95	
	MW-7	98.86	11.98	86.88	
	MW-8	99.09	13.86	85.23	
	MW-9	99.42	12.30	87.12	



Appendix B continued

Date	Monitoring Well ID	TOC Elevation (feet - msl)	Depth to Groundwater (feet)	Water Level Elevation (feet - msl)	Groundwater Flow Direction & Gradient
11/17/04	MW-1	99.52	12.45	87.07	Northwesterly i = 0.01
	MW-2	99.39	11.97	87.42	
	MW-3	99.18	10.40	88.78	
	MW-4	98.79	11.90	86.89	
	MW-5	99.16	11.43	87.73	
	MW-6	99.42	11.99	87.43	
	MW-7	98.86	11.49	87.37	
	MW-8	99.09	14.38	84.71	
	MW-9	99.42	11.86	87.56	
02/17/05	MW-1	99.52	7.79	91.73	Northeasterly i = 0.02
	MW-2	99.39	7.47	91.92	
	MW-3	99.18	7.25	91.90	
	MW-4	98.79	6.78	92.01	
	MW-5	99.16	9.02	90.14	
	MW-6	99.42	6.60	92.82	
	MW-7	98.86	6.29	92.57	
	MW-8	99.09	8.96	90.13	
	MW-9	99.42	6.50	92.92	



Appendix B continued

Date	Monitoring Well ID	TOC Elevation (feet - msl)	Depth to Groundwater (feet)	Water Level Elevation (feet - msl)	Groundwater Flow Direction & Gradient (i)
05/25/05	MW-1	99.52	6.48	93.04	Northeasterly i = 0.02
	MW-2	99.39	5.90	93.49	
	MW-3	99.18	6.29	92.89	
	MW-4	98.79	5.31	93.48	
	MW-5	99.16	8.60	90.56	
	MW-6	99.42	5.44	93.98	
	MW-7	98.86	5.12	93.74	
	MW-8	99.09	7.98	91.11	
	MW-9	99.42	5.45	93.97	
08/30/05	MW-1	99.52	10.52	89.00	Northeasterly i = 0.007
	MW-2	99.39	10.40	88.99	
	MW-3	99.18	9.32	89.96	
	MW-4	98.79	10.10	88.69	
	MW-5	99.16	10.10	89.06	
	MW-6	99.42	10.45	88.97	
	MW-7	98.86	9.95	88.91	
	MW-8	99.09	10.63	88.46	
	MW-9	99.42	10.43	88.99	



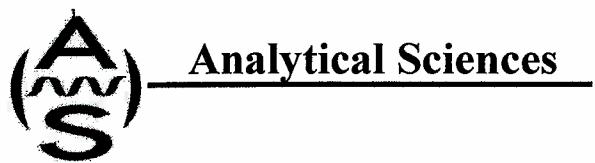
APPENDIX C

Appendix C: Historical Groundwater Flow Direction and Gradient Data - Deep Wells

Date	Monitoring Well ID	TOC Elevation (feet - msl)	Depth to Groundwater (feet)	Water Level Elevation (feet - msl)	Groundwater Flow Direction & Gradient (i)
11/19/04	MW-1D	99.11	15.51	83.60	N 75°W i = 0.03
	MW-2D	98.45	15.12	83.33	
	MW-3D	98.89	17.32	81.57	
02/17/05	MW-1D	99.11	10.40	88.71	N 80° W i = 0.02
	MW-2D	98.45	10.12	88.33	
	MW-3D	98.89	11.85	87.04	
05/25/05	MW-1D	99.11	9.14	89.97	N 80° W i = 0.02
	MW-2D	98.45	8.92	89.53	
	MW-3D	98.89	10.45	88.44	
08/30/05	MW-1D	99.11	13.32	85.79	N 80° W i = 0.02
	MW-2D	98.45	13.11	85.34	
	MW-3D	98.89	14.60	84.29	



APPENDIX D



Analytical Sciences

September 12, 2005

Lee Hurvitz
Trans Tech Consultants
930 Shiloh Road, Building 44, Suite J
Windsor CA, 95492

Dear Lee,

Enclosed you will find Analytical Sciences' final report 5083101 for your Royal Coach Car Wash project. An invoice for this work is enclosed.

Should you or your client have any questions regarding this report please contact me at your convenience. We appreciate you selecting Analytical Sciences for this work and look forward to serving your analytical chemistry needs on projects in the future.

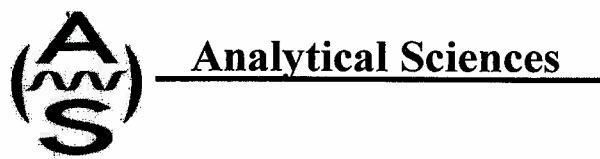
Sincerely,

Analytical Sciences

A handwritten signature in black ink that reads "Mark A. Valentini".

Mark A. Valentini, Ph.D.

Laboratory Director



Report Date: September 12, 2005

Laboratory Report

Lee Hurvitz
Trans Tech Consultants
930 Shiloh Road, Building 44, Suite J
Windsor CA, 95492

Project Name: **Royal Coach Car Wash** **1222.01**
Lab Project: **5083101**

This 13 page report of analytical data has been reviewed and approved for release.

A handwritten signature in black ink that reads "Mark A. Valentini".

Mark A. Valentini, Ph.D.
Laboratory Director



TPH Gasoline in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-01	MW-1	Gasoline	6200	500
Date Sampled:	08/30/05	Date Analyzed:	08/31/05	QC Batch: B000045
Date Received:	08/30/05	Method:	EPA 5030/8015	

TPH Gasoline in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-02	MW-4	Gasoline	1400	50
Date Sampled:	08/30/05	Date Analyzed:	09/01/05	QC Batch: B000045
Date Received:	08/30/05	Method:	EPA 5030/8015	

TPH Gasoline in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-03	MW-7	Gasoline	43000	2500
Date Sampled:	08/30/05	Date Analyzed:	09/01/05	QC Batch: B000045
Date Received:	08/30/05	Method:	EPA 5030/8015	

TPH Gasoline in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-04	MW-8	Gasoline	320	50
Date Sampled:	08/30/05	Date Analyzed:	08/31/05	QC Batch: B000045
Date Received:	08/30/05	Method:	EPA 5030/8015	



TPH Gasoline in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-05	MW-1D	Gasoline	95	50
Date Sampled:	08/30/05	Date Analyzed:	08/31/05	QC Batch: B000045
Date Received:	08/30/05	Method:	EPA 5030/8015	

TPH Gasoline in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-06	MW-2D	Gasoline	ND	50
Date Sampled:	08/30/05	Date Analyzed:	08/31/05	QC Batch: B000045
Date Received:	08/30/05	Method:	EPA 5030/8015	

TPH Gasoline in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-07	MW-3D	Gasoline	ND	50
Date Sampled:	08/30/05	Date Analyzed:	08/31/05	QC Batch: B000045
Date Received:	08/30/05	Method:	EPA 5030/8015	



Volatile Hydrocarbons by GC/MS in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-01	MW-1	Benzene	1200	20
		Toluene	ND	20
		Ethylbenzene	330	20
		m,p-Xylene	ND	20
		o-Xylene	ND	20
		1,2-Dibromoethane (EDB)	ND	20
		1,2-Dichloroethane (EDC)	ND	20
		Tertiary Butyl Alcohol (TBA)	ND	500
		Methyl tert-Butyl Ether (MTBE)	190	20
		Di-isopropyl Ether (DIPE)	ND	20
		Ethyl tert-Butyl Ether (ETBE)	ND	20
		Tert-Amyl Methyl Ether (TAME)	46	20
Surrogates		Result (ug/L)	% Recovery	Acceptance Range (%)
Dibromofluoromethane		19.6	98	70-130
Toluene-d8		20.4	102	70-130
4-Bromofluorobenzene		19.8	99	70-130

Date Sampled:	08/30/05	Date Analyzed:	09/03/05	QC Batch: B000037
Date Received:	08/30/05	Method:	EPA 8260B	



Volatile Hydrocarbons by GC/MS in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-02	MW-4	Benzene	19	1.0
		Toluene	ND	1.0
		Ethylbenzene	3.8	1.0
		m,p-Xylene	12	1.0
		o-Xylene	6.2	1.0
		1,2-Dibromoethane (EDB)	ND	1.0
		1,2-Dichloroethane (EDC)	ND	1.0
		Tertiary Butyl Alcohol (TBA)	1300	120
		Methyl tert-Butyl Ether (MTBE)	53	1.0
		Di-isopropyl Ether (DIPE)	ND	1.0
		Ethyl tert-Butyl Ether (ETBE)	ND	1.0
		Tert-Amyl Methyl Ether (TAME)	11	1.0
Surrogates		Result (ug/L)	% Recovery	Acceptance Range (%)
Dibromofluoromethane		19.7	98	70-130
Toluene-d8		20.3	102	70-130
4-Bromofluorobenzene		20.6	103	70-130

Date Sampled:	08/30/05	Date Analyzed:	09/03/05	QC Batch: B000037
Date Received:	08/30/05	Method:	EPA 8260B	



Volatile Hydrocarbons by GC/MS in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-03	MW-7	Benzene	7600	100
		Toluene	5500	100
		Ethylbenzene	4300	100
		m,p-Xylene	5200	100
		o-Xylene	1900	100
		1,2-Dibromoethane (EDB)	ND	100
		1,2-Dichloroethane (EDC)	ND	100
		Tertiary Butyl Alcohol (TBA)	ND	2500
		Methyl tert-Butyl Ether (MTBE)	ND	100
		Di-isopropyl Ether (DIPE)	ND	100
		Ethyl tert-Butyl Ether (ETBE)	ND	100
		Tert-Amyl Methyl Ether (TAME)	ND	100
Surrogates		Result (ug/L)	% Recovery	Acceptance Range (%)
Dibromofluoromethane		19.3	96	70-130
Toluene-d8		20.3	102	70-130
4-Bromofluorobenzene		20.0	100	70-130

Date Sampled:	08/30/05	Date Analyzed:	09/03/05	QC Batch: B000037
Date Received:	08/30/05	Method:	EPA 8260B	



Volatile Hydrocarbons by GC/MS in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-04	MW-8	Benzene	31	1.0
		Toluene	ND	1.0
		Ethylbenzene	ND	1.0
		m,p-Xylene	1.1	1.0
		o-Xylene	1.4	1.0
		1,2-Dibromoethane (EDB)	ND	1.0
		1,2-Dichloroethane (EDC)	ND	1.0
		Tertiary Butyl Alcohol (TBA)	160	25
		Methyl tert-Butyl Ether (MTBE)	110	1.0
		Di-isopropyl Ether (DIPE)	ND	1.0
		Ethyl tert-Butyl Ether (ETBE)	ND	1.0
		Tert-Amyl Methyl Ether (TAME)	20	1.0
Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)	
Dibromofluoromethane	19.4	97	70-130	
Toluene-d8	19.8	99	70-130	
4-Bromofluorobenzene	20.2	101	70-130	

Date Sampled:	08/30/05	Date Analyzed:	09/03/05	QC Batch:	B000037
Date Received:	08/30/05	Method:	EPA 8260B		



Volatile Hydrocarbons by GC/MS in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-05	MW-1D	Benzene	ND	1.0
		Toluene	ND	1.0
		Ethylbenzene	ND	1.0
		m,p-Xylene	ND	1.0
		o-Xylene	ND	1.0
		1,2-Dibromoethane (EDB)	ND	1.0
		1,2-Dichloroethane (EDC)	ND	1.0
		Tertiary Butyl Alcohol (TBA)	ND	25
		Methyl tert-Butyl Ether (MTBE)	23	1.0
		Di-isopropyl Ether (DIPE)	ND	1.0
		Ethyl tert-Butyl Ether (ETBE)	ND	1.0
		Tert-Amyl Methyl Ether (TAME)	2.4	1.0
Surrogates		Result (ug/L)	% Recovery	Acceptance Range (%)
Dibromofluoromethane		19.0	95	70-130
Toluene-d8		19.8	99	70-130
4-Bromofluorobenzene		20.2	101	70-130

Date Sampled:	08/30/05	Date Analyzed:	09/02/05	QC Batch: B000037
Date Received:	08/30/05	Method:	EPA 8260B	



Volatile Hydrocarbons by GC/MS in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-06	MW-2D	Benzene	ND	1.0
		Toluene	ND	1.0
		Ethylbenzene	ND	1.0
		m,p-Xylene	ND	1.0
		o-Xylene	ND	1.0
		1,2-Dibromoethane (EDB)	ND	1.0
		1,2-Dichloroethane (EDC)	ND	1.0
		Tertiary Butyl Alcohol (TBA)	ND	25
		Methyl tert-Butyl Ether (MTBE)	1.5	1.0
		Di-isopropyl Ether (DIPE)	ND	1.0
		Ethyl tert-Butyl Ether (ETBE)	ND	1.0
		Tert-Amyl Methyl Ether (TAME)	ND	1.0
Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)	
Dibromofluoromethane	19.8	99	70-130	
Toluene-d8	19.8	99	70-130	
4-Bromofluorobenzene	19.8	99	70-130	

Date Sampled:	08/30/05	Date Analyzed:	09/02/05	QC Batch:	B000037
Date Received:	08/30/05	Method:	EPA 8260B		



Volatile Hydrocarbons by GC/MS in Water

Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083101-07	MW-3D	Benzene	ND	1.0
		Toluene	ND	1.0
		Ethylbenzene	ND	1.0
		m,p-Xylene	ND	1.0
		o-Xylene	ND	1.0
		1,2-Dibromoethane (EDB)	ND	1.0
		1,2-Dichloroethane (EDC)	ND	1.0
		Tertiary Butyl Alcohol (TBA)	ND	25
		Methyl tert-Butyl Ether (MTBE)	6.8	1.0
		Di-isopropyl Ether (DIPE)	ND	1.0
		Ethyl tert-Butyl Ether (ETBE)	ND	1.0
		Tert-Amyl Methyl Ether (TAME)	ND	1.0
Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)	
Dibromofluoromethane	19.4	97	70-130	
Toluene-d8	20.3	102	70-130	
4-Bromofluorobenzene	19.8	99	70-130	

Date Sampled:	08/30/05	Date Analyzed:	09/02/05	QC Batch:	B000037
Date Received:	08/30/05	Method:	EPA 8260B		



Quality Assurance Report

TPH Gasoline in Water

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B000045 - EPA 5030

Blank (B000045-BLK1)				Prepared & Analyzed: 08/31/05					
Gasoline	ND	50	ug/L						
Matrix Spike (B000045-MS1)				Source: 5083102-01 Prepared & Analyzed: 08/31/05					
Benzene	11.0	0.50	ug/L	10.0	1.8	92	70-130		
Toluene	9.62	0.50	ug/L	10.0	0.36	93	70-130		
Ethylbenzene	11.0	0.50	ug/L	10.0	1.2	98	70-130		
Xylenes, total	31.4	1.5	ug/L	30.0	1.2	101	70-130		
Matrix Spike Dup (B000045-MSD1)				Source: 5083102-01 Prepared & Analyzed: 08/31/05					
Benzene	11.2	0.50	ug/L	10.0	1.8	94	70-130	2	20
Toluene	9.81	0.50	ug/L	10.0	0.36	95	70-130	2	20
Ethylbenzene	11.1	0.50	ug/L	10.0	1.2	99	70-130	1	20
Xylenes, total	31.5	1.5	ug/L	30.0	1.2	101	70-130	0	20



Volatile Hydrocarbons by GC/MS in Water

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B000037 - EPA 5030B										
Blank (B000037-BLK1)										
Prepared & Analyzed: 08/29/05										
Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
m,p-Xylene	ND	1.0	ug/L							
o-Xylene	ND	1.0	ug/L							
1,2-Dibromoethane (EDB)	ND	1.0	ug/L							
1,2-Dichloroethane (EDC)	ND	1.0	ug/L							
Tertiary Butyl Alcohol (TBA)	ND	25	ug/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	ug/L							
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L							
Ethyl tert-Butyl Ether (ETBE)	ND	1.0	ug/L							
Tert-Amyl Methyl Ether (TAME)	ND	1.0	ug/L							
<i>Surrogate: Dibromofluoromethane</i> 20.1 ug/L 20.0 100 70-130										
<i>Surrogate: Toluene-d8</i> 20.2 ug/L 20.0 101 70-130										
<i>Surrogate: 4-Bromofluorobenzene</i> 19.6 ug/L 20.0 98 70-130										
Matrix Spike (B000037-MS1)										
Source: 5082603-01 Prepared & Analyzed: 08/29/05										
1,1-Dichloroethene (1,1-DCE)	18.1	1.0	ug/L	25.0	ND	72	70-130			
Benzene	24.0	1.0	ug/L	25.0	ND	96	70-130			
Trichloroethene (TCE)	25.1	1.0	ug/L	25.0	ND	100	70-130			
Toluene	26.0	1.0	ug/L	25.0	ND	104	70-130			
Chlorobenzene	26.1	1.0	ug/L	25.0	ND	104	70-130			
<i>Surrogate: Dibromofluoromethane</i> 20.6 ug/L 20.0 103 70-130										
<i>Surrogate: Toluene-d8</i> 20.6 ug/L 20.0 103 70-130										
<i>Surrogate: 4-Bromofluorobenzene</i> 18.9 ug/L 20.0 94 70-130										
Matrix Spike Dup (B000037-MSD1)										
Source: 5082603-01 Prepared & Analyzed: 08/29/05										
1,1-Dichloroethene (1,1-DCE)	18.2	1.0	ug/L	25.0	ND	73	70-130	1	20	
Benzene	24.0	1.0	ug/L	25.0	ND	96	70-130	0	20	
Trichloroethene (TCE)	25.4	1.0	ug/L	25.0	ND	102	70-130	2	20	
Toluene	26.5	1.0	ug/L	25.0	ND	106	70-130	2	20	
Chlorobenzene	26.2	1.0	ug/L	25.0	ND	105	70-130	1	20	
<i>Surrogate: Dibromofluoromethane</i> 20.7 ug/L 20.0 104 70-130										
<i>Surrogate: Toluene-d8</i> 20.9 ug/L 20.0 104 70-130										
<i>Surrogate: 4-Bromofluorobenzene</i> 19.0 ug/L 20.0 95 70-130										



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference



Analytical Sciences

P.O. Box 750336, Petaluma, CA 94975-0336
 110 Liberty Street, Petaluma, CA 94952
 (707) 769-3128
 Fax (707) 769-8093

CHAIN OF CUSTODY

CLIENT INFORMATION	
COMPANY NAME: TRANS TECH CONSULTANTS	CONTACT: <u>Peggy Gilmore</u>
ADDRESS: 930 SHILOH RD, BLDG 44, STE J	COMPANY NAME: <u>Kentfield, CA 94940</u>
CONTACT: <u>Bob Hurst</u>	ADDRESS: <u>27 Rancher Rd</u>
PHONE#: (707) 575-8622	PHONE#: <u></u>
FAX #: (707) 837-7334	FAX #: <u></u>

BILLING INFORMATION	
COMPANY NAME:	CONTACT:
ADDRESS: WINDSOR, CA 95492	
CONTACT: <u>Bob Hurst</u>	
PHONE#: (707) 575-8622	
FAX #: (707) 837-7334	

LAB PROJECT NUMBER: <u>5883/01</u>	TRANS TECH PROJECT NAME: <u>Royal Coach Arch</u>	
GLOBAL ID: <u>70609770361</u>	GEOTRACKER EDF: <u>N</u>	
TRANS TECH PROJECT NUMBER: <u>1222.01</u>	COLDER TEMPERATURE	
TURNAROUND TIME (check one)		
MOBILE LAB	SAME DAY	24 Hours
48 HOURS	72 HOURS	<input checked="" type="checkbox"/>
5 DAYS	NORMAL	<input checked="" type="checkbox"/>
COC		
PAGE <u>1</u> OF <u>1</u>		

ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	# CONT.	PRESV. YES/NO	ANALYSIS											
							COMMENTS											
LAB SAMPLE #																		
1	MW-1	8/30	2:30	W	3	NOAS	X	X	X	X	X	X	5883/01-81					
2	MW-4		1:20															
3	MW-7		1:40															
4	MW-8		2:10															
5	MW-1D		1:55															
6	MW-2D		2:00															
7	MW-3D		1:45															
8																		
9																		
10																		
11																		

SIGNATURES

SAMPLED BY:

BRIAN HASKEDATE: 8/30/05TIME: 6:36pm

RELINQUISHED BY:

Robert

SIGNATURE

RECEIVED BY LABORATORY:

Robert

SIGNATURE

8/30/05 6:36pm
 DATE TIME

APPENDIX E

Appendix E: Historical Groundwater Analytical Data - Shallow Wells

Date	Well ID	TPH-g	B	T	E	X	MtBE	TBA	TAME
		µg/L							
'03/13/01	MW-1	2,800	370	0.81	83	<1.5	130	92	15
	MW-2	<50	<0.5	<0.5	<0.5	<1.5	1.1	<25	<0.50
	MW-3	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<25	<0.50
	MW-4	5,900	53	<0.5	310	100	1,700	<100	160
	MW-5	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<25	<0.50
	MW-6	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<25	<0.50
06/26/01	MW-1	3,700	660	1.4	95	6.2	140*	92	18
	MW-2	<50	<0.3	<0.3	<0.5	<0.5	3.3	<10	0.69
	MW-3	<50	<0.3	<0.3	<0.5	<0.5	0.76	<10	<0.50
	MW-4	2,400	25	2.3	86	18	540	110	86
	MW-5	<50	<0.3	<0.3	<0.5	<0.5	<0.5	<10	<0.50
	MW-6	<50	<0.3	<0.3	<0.5	<0.5	<0.5	<10	<0.50
09/24/01	MW-1	NS	NS	NS	NS	NS	NS	NS	NS
	MW-2	<50	<0.5	<0.5	<0.5	<1.5	1.2	<25	<1.0
	MW-3	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<25	<1.0
	MW-4	2,700	59	15	92	45	160	<120	17
	MW-5	<50	<0.5	<0.5	<0.5	<1.5	<20	<500	<20
	MW-6	NS	NS	NS	NS	NS	NS	NS	NS
12/21/01	MW-1	22,000	4,900	33	1,300	180	350*	99	36
	MW-2	<50	0.54	<0.3	<0.5	<0.5	1.6	<10	0.52
	MW-3	<50	1.2	<0.3	0.59	<0.5	0.85	<10	<0.50
	MW-4	1,500	9.8	0.49	12	5.5	43	20	4.7
	MW-5	<50	0.37	<0.3	0.58	0.90	<0.5	<10	<0.50
	MW-6	<50	<0.3	<0.3	<0.5	<0.5	<0.5	<10	<0.50

Note = Additional groundwater analytical data is available prior to March 13, 2001.
 < = Indicates the laboratory test method detection limit.
 * = Additional oxygenated fuel additives detected.
 NS = Not sampled.



Appendix E continued

Date	Well ID	TPH-g	B	T	E	X	MtBE	TBA	TAME
		µg/L							
03/27/02	MW-1	4,900	1,900	16	560	75	130	<100	18
	MW-2	<50	<0.5	<0.5	<0.5	<1.5	1.0	<25	<1.0
	MW-3	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<25	<1.0
	MW-4	420	8.2	3.3	1.5	6.4	17	<25	2.5
	MW-5	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<25	<1.0
	MW-6	<50	<0.5	<0.5	<0.5	<1.5	<1.0	<25	<1.0
06/28/02	MW-1	6,100	1,100	<5.0	380	33	150	<100	16
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.0	<25	<1.0
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-4	2,700	260	3.7	99	79	950	<25	110
	MW-5	<50	4.3	<1.0	1.7	1.0	<1.0	<25	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
10/02/02	MW-1	13,000	2,600	<25	680	26	280*	<500	<25
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.6	<25	<1.0
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-4	3,100	75	3.1	6.9	16	260	<50	35
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-7	37,000	9,700	160	3,500	1,000	140	<2,500	<100
<p>< = Indicates the laboratory test method detection limit. * = Additional oxygenated fuel additives detected. NS = Not sampled.</p>									



Appendix E continued

Date	Well ID	TPH-g	B	T	E	X	MtBE	TBA	TAME
		µg/L							
02/07/03	MW-1	11,000	2,600	30	790	95	280	<500	47
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.1	<25	<1.0
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-4	1,500	6.0	<2.0	<2.0	2.2	21*	<50	2.8
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-7	59,000	11,000	9,500	4,400	11,700	110	<2,500	<100
05/07/03	MW-1	9,400	1,700	<20	600	39	240	<500	33
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.2	<25	<1.0
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-4	930	81	2.8	3.1	15	37	<25	3.8
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-7	65,000	11,000	8,800	4,900	11,900	140	<2,500	<100
08/14/03	MW-1	12,000	3,100	<20	1,100	30	310	<500	40
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.1	<25	<1.0
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-4	1,500	190	2.2	20	59	680	510	76
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-7	51,000	8,600	2,400	3,900	4,600	<100	<2,000	<100
<p>< = Indicates the laboratory test method detection limit. * = Additional oxygenated fuel additives detected. NS = Not sampled.</p>									



Appendix E continued

Date	Well ID	TPH-g	B	T	E	X	MtBE	TBA	TAME
		µg/L							
11/18/03	MW-1	9,500	3,300	73	960	84	430	<1,000	71
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-4	2,500	83	<10	<10	19	170	<200	17
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-7	22,000	8,100	240	3,100	770	<100	<2,000	<100
02/24/04	MW-1	7,300	2,300	<50	680	59	340	<1,000	54
	MW-2	NS	NS	NS	NS	NS	NS	NS	NS
	MW-3	NS	NS	NS	NS	NS	NS	NS	NS
	MW-4	1,100	11	<1.0	<1.0	1.3	33	<25	3.6
	MW-5	NS	NS	NS	NS	NS	NS	NS	NS
	MW-6	NS	NS	NS	NS	NS	NS	NS	NS
	MW-7	46,000	8,600	6,800	4,100	10,100	<100	<2,500	<100
	MW-8	<50	<1.0	<1.0	<1.0	<1.0	35	<25	<1.0
05/26/04	MW-1	4,300	550	<5.0	120	6.5	190	<100	21
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.1	<25	<1.0
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-4	1,100	75	<1.0	1.7	8.4	28	<25	2.5
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-7	28,000	9,300	5,500	4,500	8,400	<100	<2,500	<100
	MW-8	<50	<1.0	<1.0	<1.0	<1.0	34	<25	<1.0
	MW-9	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
<p>< = Indicates the laboratory test method detection limit. * = Additional oxygenated fuel additives detected. NS = Not sampled.</p>									



Appendix E continued

Date	Well ID	TPH-g	B	T	E	X	MtBE	TBA	TAME
		µg/L							
08/11/04	MW-1	6,800	1,200	<50	420	<50	280	<1,000	<50
	MW-2	NS	NS	NS	NS	NS	NS	NS	NS
	MW-3	NS	NS	NS	NS	NS	NS	NS	NS
	MW-4	2,700	420	<10	66	84	620	1,600	77
	MW-5	NS	NS	NS	NS	NS	NS	NS	NS
	MW-6	NS	NS	NS	NS	NS	NS	NS	NS
	MW-7	47,000	8,000	4,900	4,100	7,300	<100	<2,000	<100
	MW-8	<50	<1.0	<1.0	<1.0	<1.0	23	<25	<1.0
	MW-9	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
11/17/04	MW-1	7,600	1,700	<5.0	540	12	430	150	61
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-4	3,900	140	<10	230	67	480	950	57
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
	MW-7	42,000	8,900	7,300	4,600	9,200	100	<2,000	<100
	MW-8	72	<1.0	<1.0	<1.0	<1.0	160	94	8.6
	MW-9	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0

< = Indicates the laboratory test method detection limit.
 * = Additional oxygenated fuel additives detected.
 NS = Not sampled.



Appendix E continued

Date	Well ID	TPH-g	B	T	E	X	MtBE	TBA	TAME
		µg/L							
02/17/05	MW-1	20,000	4,700	<15*	2000	<25*	690	<500	<25
	MW-2	NS	NS	NS	NS	NS	NS	NS	NS
	MW-3	NS	NS	NS	NS	NS	NS	NS	NS
	MW-4	2,200	15	<6.0*	<10*	<10*	48	<200	<10
	MW-5	NS	NS	NS	NS	NS	NS	NS	NS
	MW-6	NS	NS	NS	NS	NS	NS	NS	NS
	MW-7	140,000	16,000	17,000	8,500	19,000	<50*	<1000	<50
	MW-8	<50	<0.30	<0.30	<0.50	<0.50	66	<10	<0.50
	MW-9	<50	<0.30	<0.30	<0.50	<0.50	<0.50	<10	<0.50
05/25/05	MW-1	15,000	2,600	<15	1000	<25	630*	<500	88
	MW-2	<50	<0.30	<0.30	<0.50	<0.50	<0.50	<10	<0.50
	MW-3	<50	<0.30	<0.30	<0.50	<0.50	<0.50	<10	<0.50
	MW-4	780	42	<3.0	<5.0	<5.0	120*	960	9.9
	MW-5	<50	<0.30	<0.30	<0.50	<0.50	<0.50	<10	<0.50
	MW-6	<50	<0.30	<0.30	<0.50	<0.50	<0.50	<10	<0.50
	MW-7	95,000	10,000	13,000	5,200	14,000	110	<1000	<50
	MW-8	<50	<0.30	<0.30	<0.50	<0.50	6.5	<10	<0.50
	MW-9	<50	<0.30	<0.30	<0.50	<0.50	<0.50	<10	<0.50

< = Indicates the laboratory test method detection limit.
 * = Additional oxygenated fuel additives detected.
 NS = Not sampled.



Appendix E continued

Date	Well ID	TPH-g	B	T	E	X	MtBE	TBA	TAME
		$\mu\text{g/L}$							
08/30/05	MW-1	6,200	1,200	<20	330	<20	190	<500	46
	MW-2	NS	NS	NS	NS	NS	NS	NS	NS
	MW-3	NS	NS	NS	NS	NS	NS	NS	NS
	MW-4	1,400	19	<1.0	3.8	18.2	53	1,300	11
	MW-5	NS	NS	NS	NS	NS	NS	NS	NS
	MW-6	NS	NS	NS	NS	NS	NS	NS	NS
	MW-7	43,000	7,600	5,500	4,300	7,100	<100	<2,500	<100
	MW-8	320	31	<1.0	<1.0	2.5	110	160	20
	MW-9	NS	NS	NS	NS	NS	NS	NS	NS

< = Indicates the laboratory test method detection limit.
NS = Not sampled.



APPENDIX F

Appendix F: Historical Groundwater Analytical Data - Deep Wells

Date	Well ID	TPH-g	B	T	E	X	MtBE	TBA	TAME
		µg/L							
11/19/04	MW-1D	57	<1.0	<1.0	<1.0	<1.0	18	<25	1.1
	MW-2D	1,600	53	3.4	87	16.9	110	43	6.6
	MW-3D	<50	<1.0	<1.0	<1.0	<1.0	84	<25	5.9
02/17/05	MW-1D	<50	<0.30	<0.30	<0.50	<0.50	31	<10	<0.50
	MW-2D	<50	0.71	<0.30	<0.50	<0.50	52	<10	3.2
	MW-3D	<50	<0.30	<0.30	<0.50	<0.50	6.2*	<10	<0.50
05/25/05	MW-1D	<50	0.56	<0.30	<0.50	<0.50	41	<10	0.96
	MW-2D	<50	0.60	<0.30	<0.50	<0.50	2.1	<10	<0.50
	MW-3D	<50	0.64	<0.30	0.62	<0.50	12*	<10	0.71
08/30/05	MW-1D	95	<1.0	<1.0	<1.0	<1.0	23	<25	2.4
	MW-2D	<50	<1.0	<1.0	<1.0	<1.0	1.5	<25	<1.0
	MW-3D	<50	<1.0	<1.0	<1.0	<1.0	6.8	<25	<1.0



APPENDIX G

APPENDIX G contains the following tables:

Table G-1: Summary of the 2000 Census Data for the United States

Table G-2: Summary of the 2000 Census Data for the State of California

Table G-3: Summary of the 2000 Census Data for the County of San Francisco

Table G-4: Summary of the 2000 Census Data for the City of San Francisco

Table G-5: Summary of the 2000 Census Data for the City of San Francisco by Neighborhood

Table G-6: Summary of the 2000 Census Data for the City of San Francisco by Neighborhood by Age Group

Table G-7: Summary of the 2000 Census Data for the City of San Francisco by Neighborhood by Sex

Table G-8: Summary of the 2000 Census Data for the City of San Francisco by Neighborhood by Race

Table G-9: Summary of the 2000 Census Data for the City of San Francisco by Neighborhood by Ethnicity

Table G-10: Summary of the 2000 Census Data for the City of San Francisco by Neighborhood by Household Income

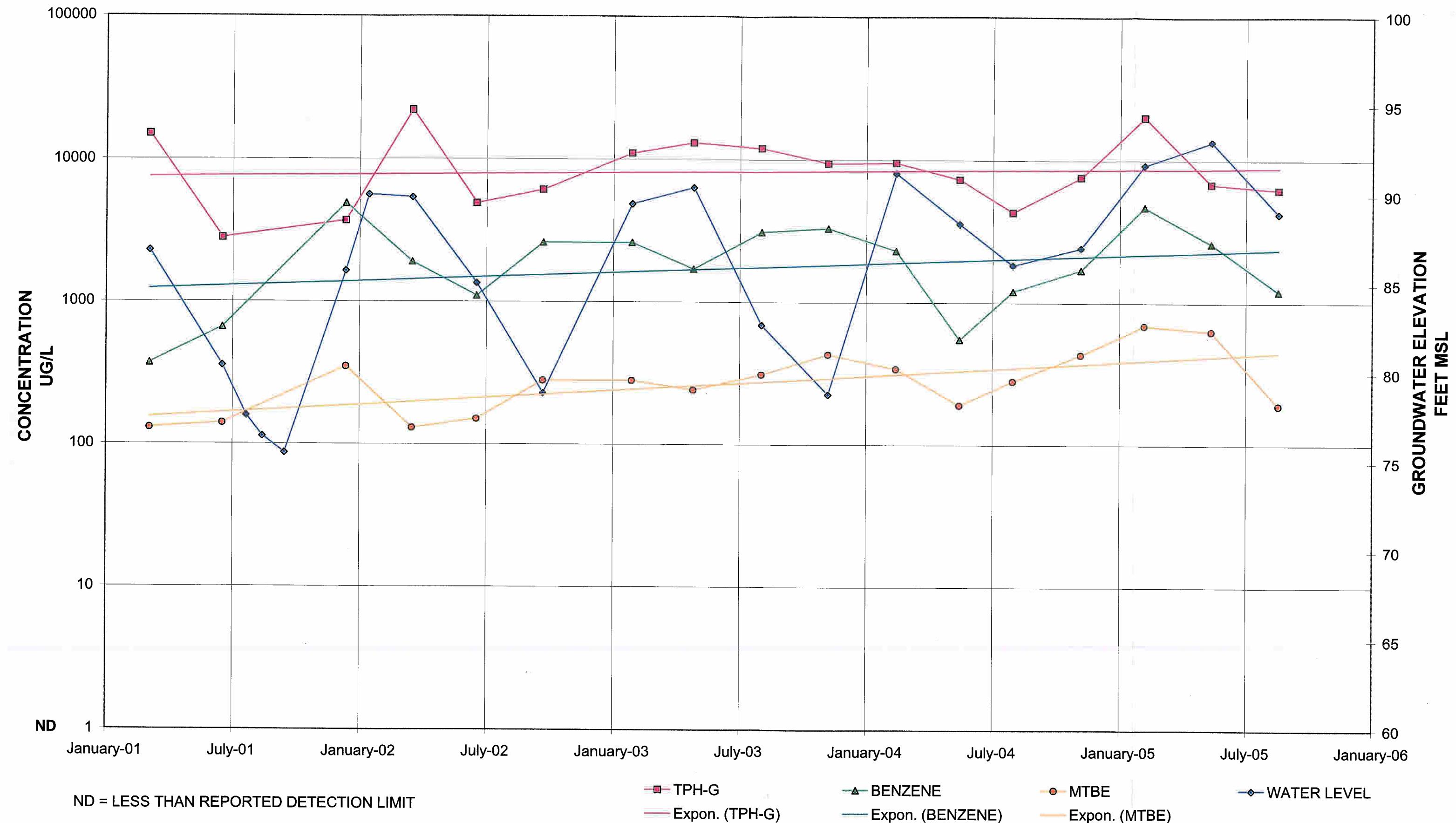
Table G-11: Summary of the 2000 Census Data for the City of San Francisco by Neighborhood by Household Size

Table G-12: Summary of the 2000 Census Data for the City of San Francisco by Neighborhood by Household Type

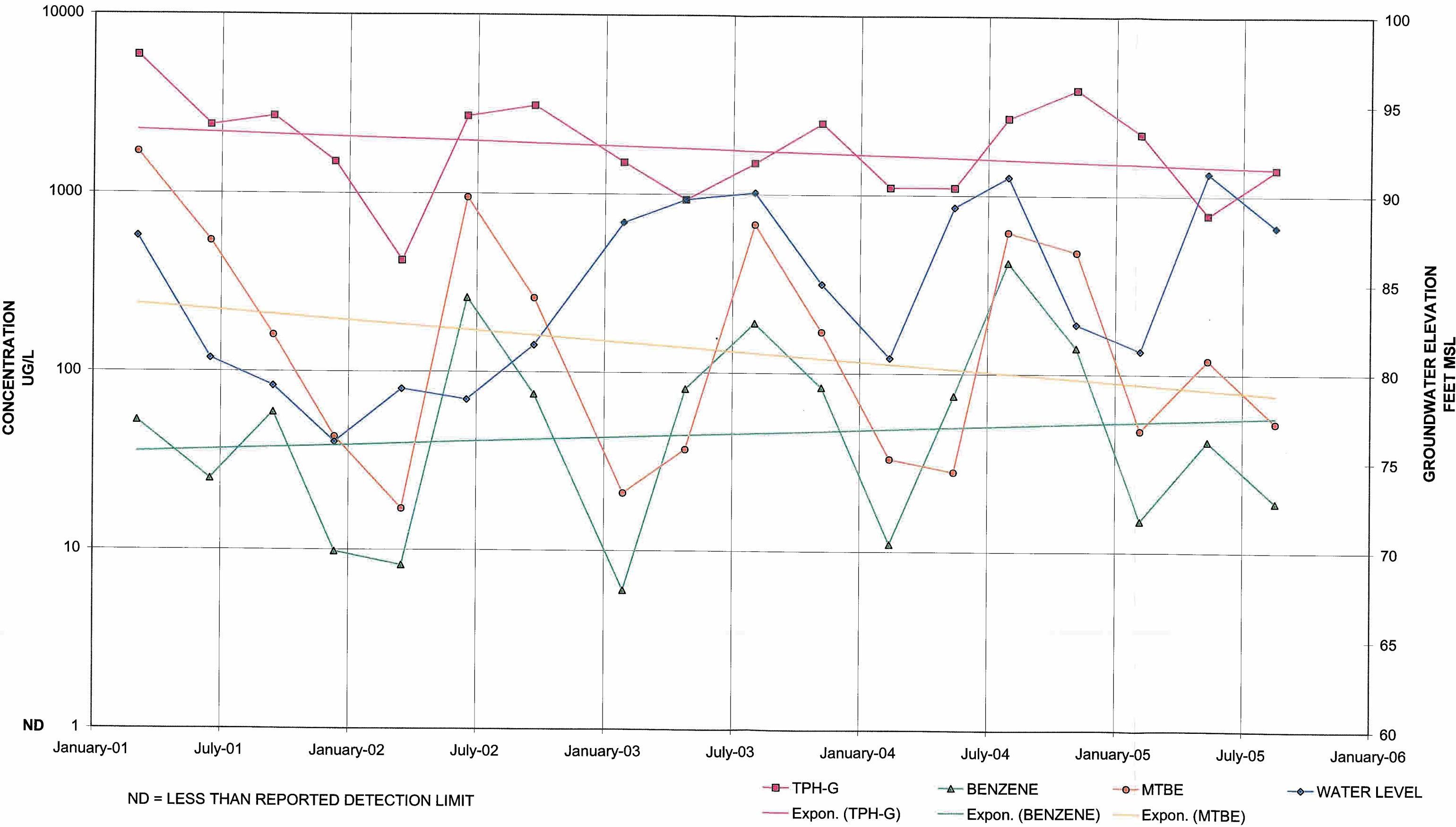
Table G-13: Summary of the 2000 Census Data for the City of San Francisco by Neighborhood by Household Composition

Table G-14: Summary of the 2000 Census Data for the City of San Francisco by Neighborhood by Household Age

TIME vs. CONCENTRATION GRAPH MW-1
ROYAL COACH CAR WASH
7360 COMMERCE BLVD., ROHNERT PARK, CALIFORNIA



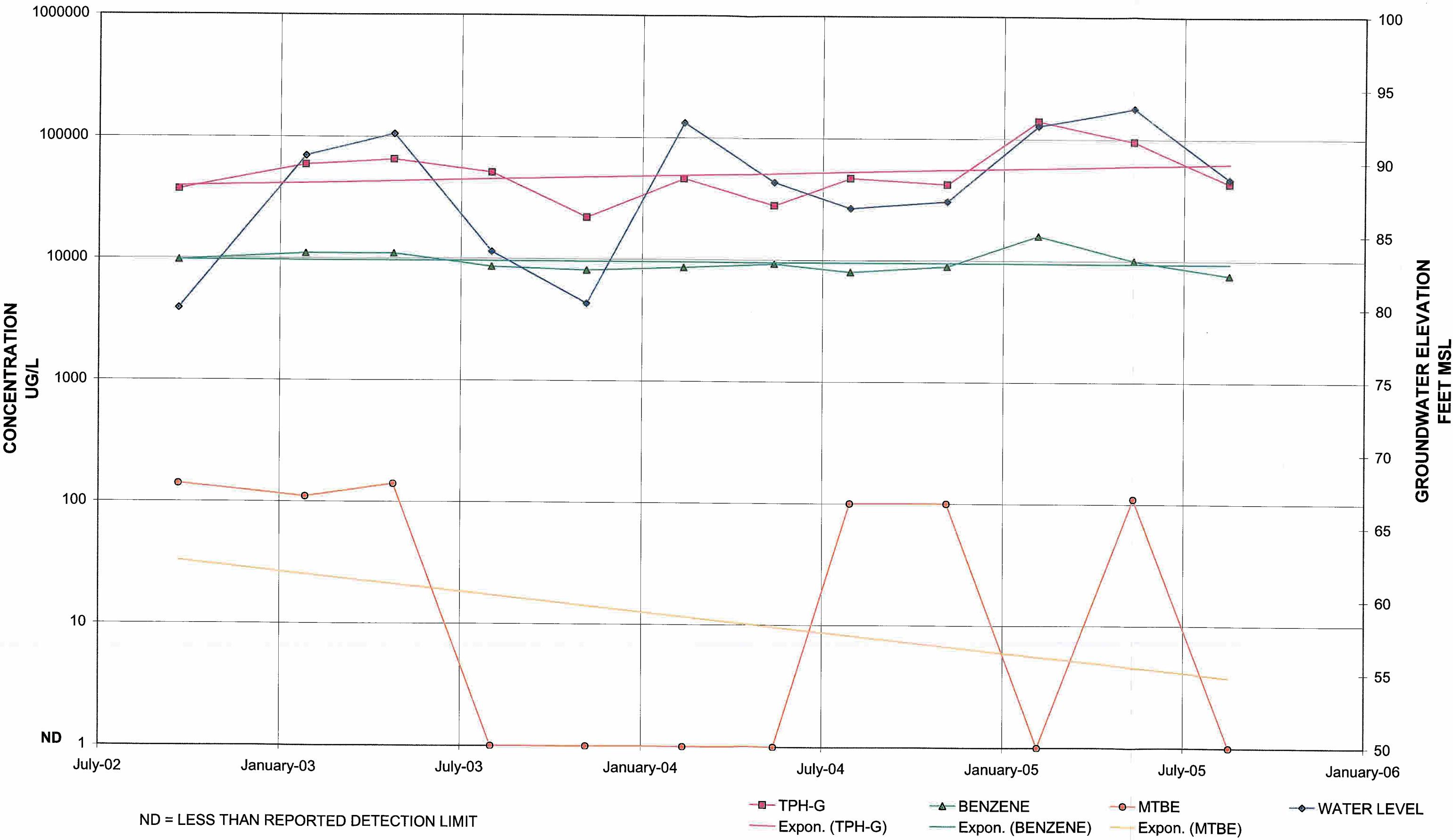
TIME vs. CONCENTRATION GRAPH MW-4
ROYAL COACH CAR WASH
7360 COMMERCE BLVD., ROHNERT PARK, CALIFORNIA



ND = LESS THAN REPORTED DETECTION LIMIT

■ TPH-G	▲ BENZENE	○ MTBE	◆ WATER LEVEL
— Expon. (TPH-G)	— Expon. (BENZENE)	— Expon. (MTBE)	

TIME vs. CONCENTRATION GRAPH MW-7
ROYAL COACH CAR WASH
7360 COMMERCE BLVD., ROHNERT PARK, CALIFORNIA



DISTRIBUTION LIST

3rd Quarter 2005 Monitoring Report

**Royal Coach Car Wash
7360 Commerce Boulevard
Cotati, California**

**Dated September 21, 2005
Job No. 1222.01**

Mr. Dale Radford
Sonoma County Department of Health Services
Environmental Health Division
475 Aviation Boulevard, Suite 220
Santa Rosa, California 95403-2097

Mr. Luis Rivera
North Coast Regional Water
Quality Control Board
5550 Skyline Boulevard, Suite A
Santa Rosa, California 95403

